



OFFICE OF THE GOVERNUR STATE OF MONTANA

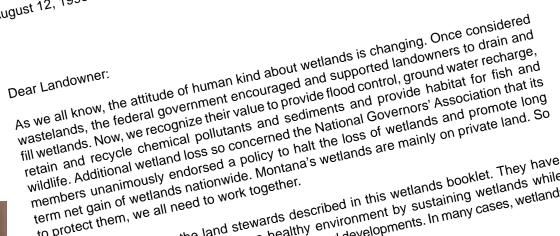


HELENA, MONTANA 59620-0801 STATE CAPITOL

MARC RACICOT Governor

August 12, 1998





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This booklet also describes many voluntary programs to restore, conserve and protect Inis pookiet also describes many voluntary programs to restore, conserve and protect wetlands. I hope that our mutual commitments to both a healthy environment in these weithers of private property voluce will promot more of private property voluce will prove the property voluce will be proved the property voluce will be proved to the proved to the property voluce will be proved to the property voluce will be proved to the prov Wellands. I nope that our mutual commitments to both a nearthy environment and these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in these maintenance of private property values will prompt many of you to participate in the property participate in th maintenance of private property values will prompt many of you to participate in these voluntary partnerships. By all working together, we can better protect this special corner of coding and continuous coding and coding God's good earth.

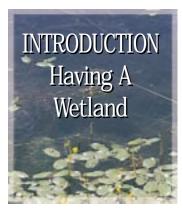
Sincerely,

MARC RACICOT Governor



FOREWORD

The purpose of this guide is to provide information for Montana landowners' informed use and management of their wetlands, bringing to life options for wetland protection, enhancement, and restoration. Simplified charts are provided to help private landowners pursue the options for themselves, by identifying and accessing the wealth of technical and financial assistance available for wetlands. And finally, for those bewildered by current wetland laws and regulations, the guide offers simple guidance.



A griculture, ranching, recreation, and wildlife habitat are all important land uses in Montana, and they often occur on or impact wetlands, lands where water is the dominant factor

determining soil, plant and animal development. These impacts raise difficult questions on both large and small acreage operations all across the state: How can we balance the needs of property owners to farm, ranch, or build on their land while maintaining the beneficial functions of natural wetlands? How can we respect individual property rights and assure that traditional land uses continue while conserving both privately and publicly owned wetlands? Answers to these questions depend on landowners' understanding the many functions of wetlands and how our land-use choices affect these valuable resources.

This guide provides a tool to help landowners use and manage wetlands. In this guide, you'll find:

SECTION 1—WHAT ARE WETLANDS

answers some of your questions about wetlands, their value, and their function

SECTION 2—WORKING WITH

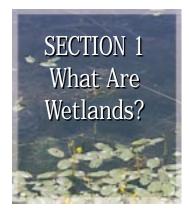
WETLANDS presents a variety of ways that Montanans manage their wetlands and reap the rewards of conserving wetlands with the help of government and other programs and through traditional land management practices

LAWS, PERMITS AND
REGULATIONS describes
current legislation and regulations, and provides time-saving charts to help you navigate the maze of federal, state and tribal laws governing Montana wetlands

SECTION 3— GETTING HELP: WHO, WHAT AND WHERE

contains charts to help you locate the wide variety of wetlandrelated programs and services available in Montana

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Do You
Think You
May Have
A Wetland?

Do you have a place on your land where you watch ducks? Or where your tractor seems to always get stuck? Chances are you have a wetland. Montana's wetlands include marshes, fens, wet meadows, riparian areas along rivers and streams, prairie potholes, and spring seeps. In a wetland, water is often on or near the surface all or part of the year; the soil is poorly drained and may smell like rotten eggs and look gray; and water-tolerant plants such as cottonwoods, willows, cattails, rushes, and sedges may be present.

What Do You Look For?

Identifying wetlands can be challenging. Generally, three attributes are present:



 Wetland hydrology: water at or near the land surface, all or part of the year

 Hydric soils: soils that are poorly drained and develop certain soil characteristics due to the presence of water and absence of oxygen



o Hushy pho



Ute Ladies Tresses, Spiranthus diluvialis

Hydrophytes: vegetation adapted to life in wet soils

Temporarily flooded pothole wetlands fill in the spring...

Ducks Unlimited, Inc. photos

and then slowly dry up during the summer months.



By fall, the wetland may no longer be wet.

How Can You Be Sure That You Have A Wetland?

Wetlands aren't always wet

As you can see in the three pictures at left, the amount of moisture in a wetland can vary during the year. During some seasons, a wetland may actually be dry.

If you think your land contains a wetland, ask a wetland specialist. Wetland specialists have training in vegetation, soils and hydrology. Some wetland specialists work for agencies like the Natural Resources Conservation Service (NRCS) and the Army Corps of Engineers (ACOE) and others are private consultants.



Shallow wetlands like this one provide valuable habitat for breeding birds.

Be sure to accompany this person so that you can ask questions and understand exactly where the wetland is and what its characteristics are. The specialist can also give you the names of people you need to contact about projects that might affect the wetland. Most

land management practices, building projects, and other actions that occur in or near wetlands require state and/or federal permits; information on these permits and the agencies that issue them is in Sections Three and Four.

What Kinds Of Wetlands Occur In Montana?

- Riverine wetlands are associated with flowing water of rivers and streams.
 Examples: sloughs, abandoned meanders, and river and creek margins.
- Depressional wetlands are low spots on the landscape. Examples: glacial and prairie potholes, saline basins, wet meadows, and ephemeral ponds.
- Lacustrine fringe wetlands are associated with lakes or deep water habitats. Examples: margins around mud flats, lakes, reservoirs and ponds.
- Slope wetlands are groundwater discharge areas on a topographic gradient. Examples: sloping wet meadows, subalpine and montane areas of higher elevation, fens, springs and seeps.
- Artificial wetlands are created by human-related activities. Examples: seeps along irrigation canals.



Riverine wetlands



Depressional wetlands



Lacustrine fringe



Slope wetlands



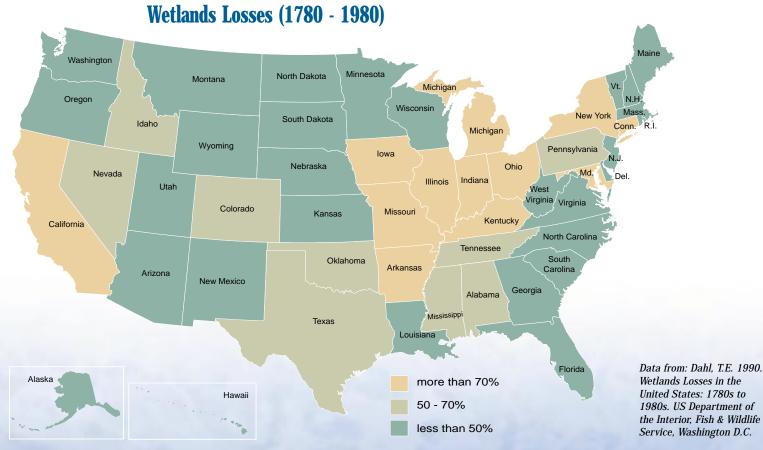
Artificial wetlands

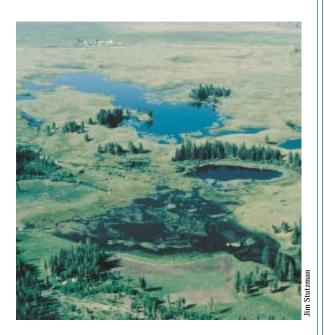
Montana Wetlands: Are They Wastelands Or Valuable Resources?

Montanans' understanding and management of their wetlands has been dynamic and has evolved over time. For many years, wetlands were considered wastelands by farmers, developers, city officials and the general public because the land was too wet to plant crops or construct buildings on them.

The federal government even encouraged the conversion of wetlands to dry land by granting subsidies to fill and drain them. As a result of all this activity, wetlands were lost in every state. It is estimated that about one-fourth of Montana's wetlands were lost because of agriculture and urbanization.

Today, however, we know wetlands are an important natural resource for waterfowl and other wildlife habitat, and for maintaining water quality. Federal and state governments provide technical assistance and some funding to protect remaining wetlands and restore lost or degraded wetlands.





A wetland is like a sponge

Soil acts like a sponge to absorb water entering the wetland and releasing it slowly. Soil, together with plants growing in it, also acts like a filter to trap pollutants in the water. As a result, water leaves the wetland cleaner than when it entered.

The sponge action of wetlands helps control flooding by retaining high water flows for later release. Flood irrigation—literally, flooding a field—acts much the same way, and is a common practice in parts of Montana. In the Beaverhead area, the Tash family applies this principle as a management practice throughout the growing season.

Bill Tash: Reflections From An "Old Flood-Irrigator's Perspective"

One of the most important aspects of managing waters in headwater states such as Montana is to demonstrate the advantage of historical practices such as flood irrigation. With only 88 frost-free days at over 6,000 feet elevations, such as the Big Hole Basin and the Centennial Valley, the only feasible crop that can be raised is native grass hay to supplement livestock feed needs in the long winters and to irrigate the valley meadows for aftermath grazing.

These century-old ranch operations, many of them in the same families since they were homesteaded, are classic examples of what good land and resource stewardship can and has accomplished. These ranchers have learned (sometimes the hard way) the most cost-effective ways to conduct their businesses and to stay in such a demanding business.

The high mountain valleys of southwestern Montana have been described as giant sponges that have the capability to store flood water runoff when the snow banks melt, especially when these flood waters are controlled and beneficially used for irrigation.

Other beneficial uses must also be recognized from this practice of "banking" the waters at these upper reaches of our river systems. Soil reservoirs are among the few affordable options we have left to allow water to "trickle-down" in a controlled release to sustain instream flows, especially for late season needs.

Flood control very certainly must be recognized as an important result of these historical practices. Flood runoff without effective controls can, and too often does, have a cumulative adverse effect on down river segments.

From this old flood irrigator's perspective; you can't make water run uphill, but you can spread it around as it goes the other way.

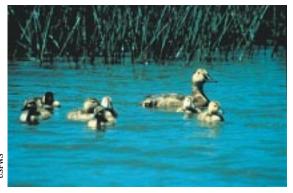
Bill Jush

Why Are Wetlands Important?

For many years, we were unaware of the important functions of wetlands. As our knowledge of these functions increased, we have come to understand the role that careful management plays in keeping natural wetland systems in balance. Montana's remaining wetlands provide services essential to our state's wildlife, water quality, and flood control. A healthy wetland can:

- Soak up large volumes of water and gradually release it to adjacent streams or water bodies during low flow periods of the year
- Recharge wells and aquifers by holding water long enough to allow the water to percolate into underlying soil, which replenishes groundwater supplies
- Support vegetation that acts as a flood buffer and stabilizes the shoreline
- Enhance water quality by holding sediments and toxins
- Naturally purify water by absorbing nutrients such as nitrogen
- Decompose organic matter and incorporate nutrients back into the food chain
- Provide habitat (food, water, shelter, and space) for millions of ducks, geese, shorebirds, and swans

- Provide habitat for numerous bird. mammal, reptile, and amphibian species
- Provide shallow water for freshwater fish to spawn, shelter and feed
- Protect habitat for threatened and endangered species. In Montana, 39 percent of endangered species are found in or are dependent on wetlands.













How Do Wetlands Benefit Ranchers And Farmers?



In the arid west, the availability of water directly affects the value of land—especially for those whose livelihoods depend on agricultural production. Wetlands are a source of water that is often overlooked. Wetlands benefit farms and ranches because they:

- Maintain late summer stream flows, which are critical for irrigating crops, watering stock, sustaining fisheries and recharging aquifers
- Maintain a higher water table than nonwetland areas, which increases subsurface irrigation and production of forage
- Filter sediment, which protects the quality of water, prolongs the life of irrigation pumps, and reduces siltation of ponds and irrigation ditches

- Reduce velocity of flood waters and bank erosion, which minimizes property losses
- Filter out chemicals applied to the land,
 - such as nitrogen, phosphorus, and pesticides, which helps keep these elements from entering nearby lakes, streams or ground water
 - Provide shrubs and trees that shelter livestock.



Although these wetland functions benefit farms and ranches, some of these benefits also apply to *everyone* who lives in Montana. Additional wetlands benefits include:

- Recreational opportunities such as hiking, fishing, hunting, and wildlife viewing
- Revenues from fishing, big game, waterfowl, and upland game bird licenses and activities
- Educational opportunities to develop knowledge and skills in nature study
- Wastewater treatment—a few small communities have constructed wetlands for this purpose.

Can Livestock Enhance Wetlands?

Can livestock, under some circumstances, enhance wetlands for waterfowl production? Research has shown that livestock may be used to help control unwanted plants. For example, reed canarygrass is taking over ungrazed wetlands, diminishing the diversity of the wetland plant community, and making these areas unfit for breeding ducks. Wendy Williams, of the Natural Resources Conservation Service (NRCS), suggests that it may be possible for stockgrowers to suppress this unwanted plant by grazing livestock at critical times, such as when the canarygrass is immature, before rhizome development. Light to moderate grazing in the spring and fall may thereby create preferred brood habitat for breeding ducks. If you think your wetland may have problems with invasive plants, you may want to get help and experiment. Many questions about wetlands are yet to be solved by observant managers.



Wetlands Have Benefits And Drawbacks

Benefits	Drawbacks
Provides subirrigation	Cost to landowners of unusable land
Attracts wildlife, which enhances educational and recreational value	Attracts wildlife, which may bring unwanted side effects such as grazing on ornamental plants
Provides flood protection due to sponge effect of wetland	Creates mosquito breeding area
Supports vegetation that acts as a flood buffer and stabilizes the shoreline	Restored wetland may become subject to jurisdictional protection
May increase property values or provide additional income	Wetland projects may require water rights
Enhances water quality by holding sediments and toxins	Elevated water levels can adversely affect septic systems



Water Rights and Wetlands

Naturally occurring wetlands don't require water rights. If you are creating, enhancing, or enlarging wetlands, then the law may require you to apply for some type of water right approval. Anytime you interfere with the natural flow of water across your property, you could be adversely affecting the prior water rights of downstream neighbors. By the same token, if you go to the time and expense of developing a wetland, you probably want the legal right to subsequently keep your upstream neighbors from excessive interference in the water flow to you.

The general rule is that if water is being diverted into or otherwise artificially manipulated to remain in a wetland (such as through excavated ponds or dikes), a water right may be required. Making that determination and what type of water right approval may be required is very site-specific, and any questions should be directed to the local DNRC Water Resources Regional Office. A list of the eight regional offices, phone numbers, and the counties they serve follows.

Office	Telephone	Counties Served
Billings	247-4415	Big Horn, Carbon, Carter, Custer, Fallon, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, Yellowstone
Bozeman	586-3136	Gallatin, Madison, Park
Glasgow	228-2561	Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley, Wibaux
Havre	254-5516	Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, Toole
Helena	449-0944	Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis & Clark, Powell, Silver Bow
Kalispell	752-2288	Flathead, Lake, Lincoln, Sanders
Lewistown	538-7459	Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, Wheatland
Missoula	721-4284	Granite, Mineral, Missoula, Ravalli

What Happens If We Interfere With Wetlands?

When wetlands are destroyed, their loss can create far-reaching impacts:

- Decline in wildlife populations
- Increased flood damage
- Increased sediment and nutrients in lakes and streams
- Contaminated drinking water and irrigation wells
- Reduced fish productivity due to poor water quality and habitat loss
- Increased costs of treating drinking water
- Reduced recreational opportunities and loss of tourist dollars
- Lower water tables
- Reduced production of livestock

Because wetlands destruction can have such far-reaching impacts, alterations to wetlands need to be reviewed by the appropriate agencies. (See Sections Three and Four.) One Montana landowner learned this lesson the hard way. He unknowingly began to build a house and pond in a wetland without first learning about wetlands protection laws and necessary permits. (Sometimes pond building can be beneficial; see Section Two.) After much hard work, he had to comply with the law and reclaim lost ground with the help of an environmental engineering company.

Before

- Stripped entire streamside (riparian) area of vegetation and topsoil during construction of a residential building pad, driveway, and recreational pond
- Constructed pond (right) in the central portion of the wetland
- Constructed building pad over a portion of the wetland using material excavated for the pond
- Piled cottonwood trees and stumps near the stream bank and burned them, which created the threat of ash and sediment washing into the stream and impacting water quality

After

- Removed downed trees, ash, and other debris from the flood plain
- Removed granular soil that was overlying the former ground surface on the flood plain
- Returned the area to the approximate grade before construction began
- · Backfilled pond with similar granular soil
- Reconstructed an irrigation ditch that had flowed across the site before excavation activities
- Re-established vegetation, including native wetland species, on the flood plain
- Constructed erosion control features along the south and east sides of the building pad, and reconstructed the slopes of the building pad
- Reduced sediment erosion during spring floods by leaving boulders, cobbles and woody debris on the ground surface of the disturbed area



September 1996, after landowner's uninformed actions, but before reclamation



September 1997, after reclamation work was completed



Do Wetlands Affect Human Health?

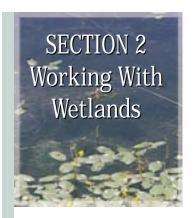
Human health is directly associated with wetlands because we all need clean water. Wetlands break down and hold nutrients. chemical pesticides, salts, sediments, and organic wastes. The pollutants can enter our water through runoff from sources such as city streets, lawns, construction sites, mining operations, and agricultural fields. In times of normal flow, wetlands act like a giant sponge and filter to reduce the amount of these elements entering lakes, streams and, ultimately, your drinking water!

The Montana State Constitution guarantees a healthy environment for its citizens. Shared responsibility for protection and improvement of Montana's water is found in Section One of Article IX and says, "The state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations."

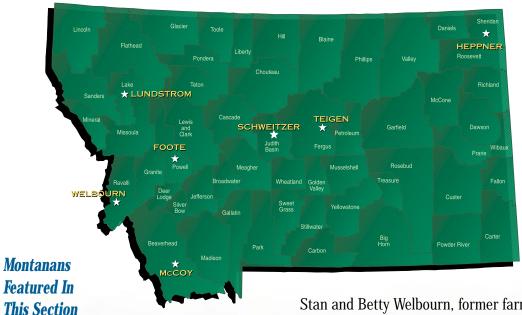




As you consider your wetland, read on to meet some of the folks who have restored and/or protected their wetlands.



In this section, you'll meet farmers and ranchers who live and work in many parts of Montana. On both large and small operations, they show the various ways that Montana landowners can manage wetlands. The Teigen family—the first example—shows that wetlands conservation has been around since homesteading days. The other people in the examples share their experience with the wetlands programs and technical assistance available from state and federal agencies.



Teigen Family, ranchers; Petroleum/Fergus Counties

Bill Lundstrom, Shooting Preserve Manager; Lake County

Lawrence and Mary Lou Heppner, farmers; Sheridan County

Stan and Betty Welbourn, former farmers; Ravalli County

Larry and Kathy Schweitzer, landscapers; Judith Basin County

Poncho and Beverly McCoy, ranchers; Beaverhead County:

Geof and Cathie Foote, ranchers; Powell County

Meet Dan Teigen

A Century Of Ranching And Caring For Wetlands

Dan Teigen tells how his family continues the management practices of his forebears:



The Teigen family has been ranching in central Montana since 1884 when three cousins from Norway drove three bands of sheep northeast from Bozeman in search of good water and open grass. They homesteaded before barbed wire in the area between Grassrange and Winnet. Today, the central portion of the ranch straddles Highway 200 and McDonald creek for about 13 miles, with the creek meanderings easily tripling that distance. The ranch also stretches along parts of Elk Creek to the south, Ford Creek to the north, near War Horse National Wildlife Refuge, as well as additional summer pasture near Cat Creek to

the northeast. Originally, sheep bought and paid for the place, but cattle have long since been paying the bills.

One isn't likely to hear the word "wetlands" spoken around the ranch, but wetlands are something you're likely to see. We practice a hands-off hooves-on approach to wetland management. Our main focus is caring for our cattle, which has us indirectly caring for our wetlands.

Our cattle are on the creek primarily during winter months, when frozen soil and creek banks are more tolerant of hoof impaction than during warmer months. The cattle go out into the hills to summer pastures as soon as possible in the spring, allowing for hay to be cut on the creek bottoms over the summer. By running a conservative cow-to-land ratio, we can trust that the cattle won't abuse their pastures, so we don't need to fence off areas or monitor excessively.

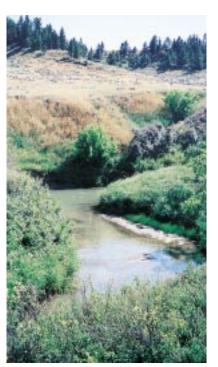
We develop stock water resources to better utilize grass all throughout pastures,

using offsite water (wells, tanks, and reservoirs) wherever possible. Even when cattle can reach creek water in winter, we prefer them drinking from offsite water because it's warmer. When a cow drinks cold creek water, she's got to eat extra hay to warm up again. Only then can she give all the necessary attention needed by her calf. That's a subtle but important area which can help to produce better performing cattle.

Cleaner offsite water sources in the summer also give us a better performance from cattle than if they are always slurping up muddy creek water. A higher yielding cattle herd can pay for its

own improved water sources in the long run. And, we believe that the long run is the only way to be in ranching.

We like
the thick brush
along the
creek for
shelter in the
winter. The
more warmth
our cattle get
from thick
growth in our
creek bottoms,
the less



warmth we need to provide them in the form of food. If cattle are out in the open in a harsh winter, we have to feed them proportionally more to keep their "internal combustion engines" running. During calving, the cows head right for the shelter and privacy of thick brush and trees along the creek bottoms.

We also like the fact that the lush vegetation along the creeks acts as a sponge to help minimize spring flooding and prolongs runoff into the dry season. By not farming right up to the edge of the creek, we leave filter strips to help keep runoff water clean and prevent

our soil from ending up in the Gulf of Mexico. Finally, if abundance and diversity of wildlife are any indication of a well balanced ecology, then we must be doing something right.

San Ty

Dan Teigen, Teigen Family Teigen Land and Livestock Company Teigen, MT 59084 (406) 428-2105

Meet Bill Lundstrom

From Rancher To Waterfowl Manager

Bill Lundstrom Shooting Preserve Manager 3410 Robertson Road Ronan, MT 59864 (406) 676-2044

Bill Lundstrom owns a 280-acre ranch in the Mission Valley, halfway between Nine Pipe National Wildlife Refuge and Pablo National Wildlife Refuge on the Flathead Indian Reservation. He has always enjoyed raising birds and felt that his land was better suited to waterfowl than cattle ranching, which was barely getting him by. He wanted to improve the waterfowl habitat and start a hunting club business, so he searched for assistance. One contact finally led to another and six years of collaboration with federal agencies has paid off for Mr. Lundstrom. He has restored 42 acres of wetland, set aside 160 acres of grassland in a conservation program and signed a perpetual conservation easement on his entire 280 acres. Acquisition of funding and technical expertise have enabled Mr. Lundstrom to earn a better income through the hunting club business, to maintain his land, and to continue to live on it while feeling that he's doing something for wildlife.

"More information needs to be out there because farmers and ranchers are in a financial bind. Any help the various agencies give will go a long way toward helping them to preserve wildlife on their lands."



The Lundstrom property before restoration began.



An enhanced wetland area after restoration.

Actions

- Created three new ponds and enhanced eight others
- Established a five-acre wetland surrounded by a ten-acre fenced area to restrict cattle from stream
- Constructed an outlet structure from a nearby irrigation ditch to provide water for the wetland
- Restored an additional 37 acres of wetlands
- Conserved 160 acres of grassland surrounding the wetlands
- Signed perpetual conservation easement on 280 acres with the US Fish and Wildlife Service (USFWS)
- Provides continual monitoring of wildlife and water level management on the restored wetlands

Who Helped?

In 1991 and 1995, respectively, Greg Neudecker and Dean Vaughan of the USFWS assisted with wetland restoration and the conservation easement. Pheasants Forever. especially John Noel, supported the fencing project surrounding the wetlands. The Montana Department of Fish, Wildlife and Parks helped Mr. Lundstrom with an agreement to set aside 160 acres of grassland for a year until 1993, when he was accepted into the former Waterbank Program. Various agencies contributed about \$10,000 total. Although the Waterbank Program is no longer accepting new contracts, it is maintaining current contracts such as Mr. Lundstrom's. He receives \$3,700 per year until the year 2002.

Permits Required

Federal 404 Confederated Salish and Kootenai Tribal permit

Benefits and Rewards

- Restoration projects have enabled the owner to continue to maintain and live on the land
- \$3,700 annual income is provided by setting aside the grassland
- Wetland restoration enhances wildlife habitat
- Owner now participates in multi-year ground nesting bird survey by University of Montana researchers

Advice

"When the information on how to proceed with wetland restoration is ready, it needs to be available to people. It would have helped me a lot to have had something like that in hand when I began searching."

-Bill Lundstrom



A restored wetland on the Lundstrom property.



Aerial view of Lundstrom's property in the Flathead.

Meet the Heppners

From Farming to Conserving the Sloughs

Lawrence and Mary Lou Heppner Westby, MT 59275 (406) 385-2550

Mr. and Mrs. Heppner own a farm in Sheridan County in the prairie pothole region of northeast Montana. Their wetlands are sloughs that are wet in some years and not so wet in other years. Instead of trying to grow crops in the sloughs, they now maintain the acreage as wetlands under the Conservation Reserve Program (CRP). In addition, they restored 750 acres of wetlands with the help of CRP. They allow some grazing on the land in the program, but restrict livestock use around the streams by fencing off the vegetation buffer areas.

Actions

- Designated 100 acres of cropland into the USDA water bank program
- Assigned 750 acres into the Conservation Reserve Program
- Seeded 750 acres of former cropland back to grass to stabilize the soil
- Fenced stream areas to limit livestock damage

Who Helped?

In 1977, the Heppners signed up with the Soil Conservation Service (now the NRCS) for the Waterbank Program; they are now completing a second ten-year contract under the Conservation Reserve Program (CRP). In 1990, they worked with Charles Gephardt at the NRCS to seed 750 acres of

former cropland as another part of the CRP. The cost-share for the grass seed and seeding was divided about evenly between the CRP and the Heppners. The CRP paid \$10 per acre for grass seed and seeding on both plots. Fencing

material to keep livestock off the river banks was at the Heppner's expense and amounted to about \$2000.

Permits Required

No permits were required.

Benefits and Rewards

- Landowners enjoy more visible wildlife such as birds, deer, and coyotes
- Land in CRP provides annual income to support farming lifestyle
- Land is available for growing hay or grazing livestock, with adjusted payments
- Landowners retain full use of land with no open hunting or fishing privileges



Advice

"It's good to use the CRP program because the NRCS promotes the use of native seed. This way the land can get back to the way it first was. It's hilly here and light gravelly land. I like to see it go back to the way it was long ago."

-Lawrence Heppner

Meet the Welbourns

Managing The Wetland By Revegetating The Stream

Stan and Betty Welbourn Retired Farmers P.O. Box 2106 Hamilton, MT 59840 (406) 961-4522

Stan and Betty Welbourn retired from their large farm operation in 1988 and now irrigate alfalfa and hay on their 40-acre property. Mill Creek crosses their land and had eroded its bank, which increased sedimentation and cut into the associated wetland. The wetland is critical for wildlife. which use the vegetation and stream corridors for protective cover and transport. The Welbourns consulted the NRCS in Hamilton and found that their stream and wetland problem could be assisted by the Wetlands Reserve Program. According to Lane Johnson at the Hamilton NRCS field office, they restored the stream because its lateral movement was drying up the associated five feet of valuable wetland on either side.

Actions

- Moved stream bank with assistance into the stream 10-20 feet to create new stream banks
- Stabilized banks with tree root wads, logs, boulders, and sod
- Connected channel widths and stabilized stream gradient with rock and log structures along the banks and at the downstream end of the meanders
- Revegetated the stream bank with shrubs

Who Helped?

The project was done under the Wetlands Reserve Program (WRP) with a cost-share agreement of 75% WRP and 25% landowner. The average cost came to about \$23 per foot of treated stream bank. Gary Decker of Westwater Consultants, Inc., Pat Vaughan of the Hamilton office of the US Department of Agriculture, and Dean Vaughan of US Fish and Wildlife Service assisted the Welbourns in the project.

Permits Required

Federal 404 State 310

Benefits and Rewards

- Stabilized and revegetated stream bank has improved wildlife habitat
- Increased stream flow improved fish habitat
- Raised streambed restored wetland acres and reduced sedimentation in the stream
- Stabilized bank protects against future erosion
- The stream and wetland are aesthetically more pleasing

Streambank erosion along Mill Creek





Moving streambanks 10-20' into the stream



Bank stabilization with tree root wads, logs and boulders

Advice

"Have a tentative plan to present so that the NRCS personnel have, in hand, a design that they can review for approval. It is important to work closely with the NRCS in the initial stages. Most likely they will be familiar with the low and high water stages of the project." -Stan Welbourn

Meet the Schweitzers

Landscaping To Enhance Wetland And Upland Habitats

Larry and Kathy Schweitzer Landscapers RR3 Box 3134 Lewistown, Montana 59457 (406) 538-6668

The Schweitzers produce hay and alfalfa on a 400-acre site that runs along Warm Springs Creek in Fergus County. Mr. Schweitzer envisioned this land as a very special place for wildlife and has grown food

plots, built waterfowl nesting structures, and planted trees for cover. He has enhanced wetlands all along the floodplain of the creek and has



done "tremendous wetland and riparian management," according to Ted Hawn of the Lewistown NRCS. Mr. Schweitzer feels pleased with the work he has accomplished in wildlife habitat enhancement. He also is pleased that some parts of the land have made a comeback just by being left alone. While that may be one method of land resto-

ration, he also can't resist the urge to dig a pond or two, or to plant a tree, or a few thousand of them. So far, Mr. Schweitzer has planted 4000 trees in one shelterbelt, another 15,000 in a pasture and 28,000 on a 240-acre property.

Actions

- Developed and improved deer, pheasant and waterfowl habitat
- Planted food plots of corn, barley, oats and wheat in the wetland and uplands
- Installed goose nesting platforms along the creek
- Planted upland shelterbelts for cover and food
- Dug two ponds to enhance waterfowl use

Who Helped?

Pheasants Forever helped plant trees while Mr. Schweitzer planned the design of food plantings and shelterbelts. Bob Watts and the Upland Game Bird Habitat Improvement Program of the Montana Department of Fish, Wildlife and Parks helped plant

shelterbelts and tall wheatgrass. Partnerships consisted of Schweitzer doing the work while trees were obtained through the state program, available through the Conservation District. Ted Hawn of NRCS worked with Mr. Schweitzer on the pond projects. The US Fish and Wildlife Service, assisted by Mike Gettman, has also been involved in pond building.

Permits Required

Federal 404 State 310

Benefits and Rewards

- Replenished the habitat from which he has hunted
- Increased numbers and diversity of wildlife, waterfowl, and upland birds
- Improved wildlife watching (seeing more deer, pheasants, fox and marsh hawks than before)
- Feeling that one person can make a positive difference in the landscape

Advice

"I keep learning about planting shelterbelts by trying new things. Know what to plant, native if possible, and then how to space the plants. To lessen wind action, plant shelterbelts on a contour. . . . Sometimes I wonder if I'm getting anywhere, but when I see a hen and brood of chicks run across the way, I know I'm on the right track."

-Larry Schweitzer



Judy McC

Meet the McCoys

Improving Wetlands For Waterfowl And Calving

Poncho and Beverly McCoy Cattle Ranchers McCoy Cattle Company 5600 Highway 91 North Dillon, MT 59725 (406) 683-2980

Poncho and Beverly McCoy, owners and workers on their cattle company in Beaverhead County, became concerned about the diminishing duck population in the late 1980s and decided to do something about it. They improved waterfowl habitat on their existing wetlands by developing six small ponds along a series of spring creeks. After nine years of hard work, monitoring, and trial and error, they are finally seeing an increase in waterfowl numbers. The McCoys feel a deep satisfaction in watching the geese return each year. They also model their wetlands for educational purposes to 4H Clubs and school children. In addition, they have found that their wetland restoration also provides a good place for their cows to calve.

"As a hunter and fisherman, I want to put back what I have enjoyed. It's very satisfying to have wetlands on the property; they make the whole landscape better."

Actions

- Built eight elevated culvert nesting structures
- Blocked streams to increase water surface
- Excavated gravel to flood more shallow areas for feed
- Installed culverts to raise the water level
- Reseeded wetlands with hay and orchard grass
- Maintained culverts, monitored sites, and adjusted strategy to enhance nesting
- Maintained warm spring creeks for spring nesting and fall migration

Who Helped?

Jeff Herbert of the Montana
Department of Fish, Wildlife and
Parks, through the Montana Waterfowl
Stamp Program, provided the culverts,
helped with the cost of excavation, and then
returned to monitor the wildlife use. The
Natural Resources Conservation Service,
particularly Rich Nordquist, helped design
the projects and provided technical
assistance.

State 310

Permits Required
Federal 404

Benefits and Rewards

- Satisfaction in seeing wetlands habitat activity on the property
- Increased waterfowl use by both returning waterfowl and new breeding pairs
- Provides educational example for school children
- · Reseeded wetland provides calving ground



Advice

"Keep changing what you're doing if it's not working and learn as you go. Nesting structures have to provide a sense of safety for the waterfowl. In making land changes, sometimes the biggest challenge is what to do with the dirt you dig from a pond. We used some of the dirt and gravel to narrow and deepen the creek so fish could use it for spawning. Other dirt was used to fill and smooth nearby bumpy ground. The area was then seeded in tall wheatgrass, which now provides calving grounds for the cows." -Poncho McCoy

Meet the Footes

Ranching And Total Land Stewardship

Geof and Kathie Foote, Ranchers Meadow Springs Ranch Ovando, MT 59854 (406) 793-5720

Twenty-three years ago, Geof and Kathie Foote bought land with low rolling hills, glacial

potholes, mixed pine, fir and spruce forests, grasslands and wetlands, all cut by a major spring-fed tributary to the Blackfoot River. However, agricultural use since 1890 had produced overgrazed grasslands.

depleted woodlots and degraded streams. Geof and Kathie envisioned restoring the land to its natural communities and molded their lifestyle to fit these biological systems. The restoration was approached as an interconnected system of forest, grassland, wetland and stream. All aquatic and terrestrial life, including human residents, would be affected by any changes in this environment. With careful planning, the Footes' have achieved this renovation and secured it with a perpetual conservation easement on the land.

"We think about sustainability in land use and want to demonstrate this philosophy by our stewardship of the land and our lifestyle. Since the restoration of the forests, grassland, wetland and stream habitats, we have observed an increase in the diversity of predator-prey populations. This indicates to us a return to health of the natural systems. After four years of attempted nesting, a pair of bald

eagles are raising young." - Geof and Kathie Foote



Sam Curtis

Actions

- Constructed fences to control grazing of grasslands and forest
- Harvested damaged trees by low-impact horse-logging
- in forest while selecting superior tree stock for future generations
- Built small dam to impound some of Dick Creek to provide constant water source for nesting marsh, hay irrigation and potential power generation
- Constructed passage for fish around the dam

- Fenced Dick Creek from domestic grazing and returned it to its natural stream channel
- Expanded spawning area of stream for fish reproduction
- Developed wetland with water level controls for breeding waterfowl
- Developed marsh filter system to filter domestic stock runoff
- Planted woody shrubs and grasses along stream bank for stabilization and shade to reduce water temperatures for fish habitat
- Placed woody debris along creek to provide cover for fish and aquatic life
- Built houses and platforms for nesting ducks, geese, upland birds and cavity-nesting mammals

Who Helped?

The US Fish and Wildlife Service (USFWS), especially Gary Sullivan, Greg Neudecker and Jim Stutzman, provided planning and technical assistance through its Partners for Fish and Wildlife program. Ducks Unlimited reimbursed the USFWS \$10.000 of the \$18,000 cost of the wetland restoration project. The Footes contributed their own equipment, labor, logs, sawmill, and funds. Restoring Dick Creek involved many groups to plan the extensive fish habitat/waterfowl breeding marsh and filter system. These groups included Partners for Fish and Wildlife, USFWS, MDFWP, National Fish and Wildlife Fund, the Blackfoot Chapter of Trout Unlimited, plus the NRCS.

Permits Required

Federal 404 State 310

Benefits and Rewards

- Increased hay production from 175 to 700 bales due to renewed water control and irrigation, which also greens up the fall pasture
- Increased numbers and diversity of natural communities of waterfowl, bald eagle, black tern, great gray owl, mountain lion, red fox, goshawk and merlin, elk and deer
- Increased spawning areas for fish
- Faster-growing woodlot due to selective removal of over-stocked trees, which were used for the dam structure
- Cleaner creek due to filtered water system that treats organic runoff from domestic stock
- Potential electricity source provided by dam

Advice

"If you restore a wetland with waterfowl breeding in mind, stabilization of the water levels during the nesting season is essential. Adding vegetative cover allows visual seclusion of nesting birds while islands provide predator protection." -Geof Foote



Widgeon Marsh before restoration



Widgeon Marsh after restoration

Opportunity or Challenge?

In spite of all the positive examples on these pages, wetlands remain problematic for some Montana landowners. Why? One example may serve to illustrate. When John Q. Landowner applied for one type of federal farm program assistance, he gave permission to NRCS staff to come and examine his property. This led to a delineation of the wetlands on his land. Once the wetland areas were delineated, for John to qualify for the federal assistance, he had to agree to limitations on how his land would be used. John was not happy with this outcome and his wetlands, thereby, took on a negative light. This situation contrasts considerably with those shown on these pages, where landowners found enterprising ways to turn the "problem" of wetlands into an opportunity!

Wetland Restoration In Montana

In 1989, President Bush Sr. issued a pledge to work toward the goal of "no net loss of wetlands". No net loss means that wetland losses must be offset by wetland gains in terms of actual acreage and ecosystem function. Statistics show that the average annual net loss of wetlands is currently 117,000 acres nationwide. Due to increased awareness and restoration programs, this rate of loss has declined by 60 percent from the previous decade. The Montana Wetlands Legacy is helping reach the national goal of "no net loss of wetlands".



Greg Neudecker

Montana Wetlands Legacy:

Protecting and Restoring Wetland and Riparian habitats in Montana

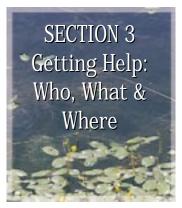
The Montana Wetlands Legacy is a voluntary, incentive-based program committed to conserving Montana's wetlands, riparian areas, and associated uplands. The Legacy partners have set a five-year goal to protect 100,000 acres of these important habitats with on-the-ground projects by securing funds for wildlife habitat agreements, conservation easements, and fee title acquisitions. The Legacy is continually seeking new projects which include high-quality wetlands and riparian areas that landowners and land managers have a desire to conserve. Please contact the Wetlands Legacy Coordinator for more information.

Montana Wetlands Legacy Coordinator Montana Fish, Wildlife and Parks-Wildlife Division 1420 E. 6th Ave. Helena, MT 59620 406-444-2612

Montana Wetlands Legacy partners include the following organizations and agencies who protect and restore wetlands and riparian areas in Montana:

American Public Land Exchange
American Rivers
Ducks Unlimited, Inc.
Five Valleys Land Trust
Flathead Land Trust
Gallatin Valley Land Trust
Montana Association of Conservation Districts
Montana Audubon Council
Montana Department of Environmental Quality
Montana Department of Natural Reources and Conservation
Montana Department of Transportation
Montana Fish, Wildlife and Parks

Montana Natural Heritage Program
Montana Watercourse
PPL-Montana
The Conservation Fund
The Nature Conservancy
The River Network
U.S. Bureau of Land Management
U.S. Bureau of Reclamation
USDA Forest Service
USDA Natural Resources Conservation Service
U.S. Fish and Wildlife Service



As the previous case studies show, many landowners recognize the benefits of wetlands on their land and want to restore or conserve them. Some landowners undertake restoration and protection projects at their own expense,

other landowners participate in voluntary programs administered by public agencies and private organizations. In this section, you will find information about these agencies, organizations, and programs. They can help answer questions you might have, such as: How can I manage my wetlands for conservation? What are the advantages and disadvantages? What do I need to consider before starting a water retention or wildlife habitat project? How can I pay for it?

What's Right For Me?

If you are considering wetlands restoration or enhancement on your land, how do you decide what actions to take? You can determine several possible options by asking yourself four questions:

- Do you want to continue to own your wetland?
- Do you want to be the sole manager of the property?
- Do you want to be paid for the property?
- Do you want to regulate future use of the wetland after the property title is transferred?

Use the decision tree on page 26 as a starting point to explore your options, then refer to the charts that follow for more details.

Some Landowner Options

If you have a wetland on your property, you can choose from a wide range of options to restore and/or conserve the wetland. They range from retaining ownership to donating the land, and are described next.

Retain ownership and guide future use of the property. You can choose one or a combination of options:

- 1. Conservation Easements are a perpetual legal agreement between a private property owner and a qualified conservation organization, such as a land trust, to voluntarily place restrictions on the type and amount of development that may take place on a piece of property and to protect significant natural features including wildlife or wildlife habitat. Conservation easements allow the property owner to retain ownership of the wetland while potentially receiving income and estate tax reductions (see chart).
- 2. Leases are agreements for the rental of land by a landowner to a conservation organization or agency for a specified period of time. The landowner receives periodic payments for the leased property while the use and protection of the land are in the hands of the agency.

- 3. Restoration involves the active rehabilitation of a degraded wetland to recover its natural attributes, functions and values. You receive technical and financial assistance for restoration projects, and may gain economically from recreational and other benefits.
- 4. Management Agreements are worked out between a landowner and a conservation agency. Either the landowner or conservation agency agrees to maintain the property in a manner consistent with the goals of the conservation agency and the landowner.
- 5. Limited Development
 Strategies involve the sensitive
 development of the least
 environmentally significant portions
 of property to finance conservation
 of the remaining property and meet
 landowner's economic needs and
 goals.
- 6. Remainder interests transfer full or partial interest in a property to an appropriate grantee, such as a nonprofit conservation organization, after the death of a landowner. It may also affect any subsequent title holders whom the landowner names.

Montana Organizations That Handle Conservation Easements

Sell the property.

You can sell land to a conservation organization at full market value, as a bargain sale (a price below full market value), an installment sale, or a right of first refusal.

Donate the land.

If you donate land (transfer of title without compensation) to a conservation organization (land trust), you ensure total protection for the wetland and that it will be maintained and enhanced.



Where To Find Help

Do you have a wetland on your property? Do you want to restore a wetland? Are you thinking of creating a wetland? If so, help is close at hand. Experts at federal, state, tribal and local agencies, as well as private organizations, can provide the information you need—and they are only a phone call away. Consult the two charts that follow, "A Quick Reference Guide to Wetlands Programs," and "A Detailed Guide to Wetlands Assistance."

Montana Organizations That namule Conservation Easements				
Organization	Contact Person/Address	Telephone/E-mail/Website	Scope of Work	
Bitter Root Land Trust	Pam Gouse 120 S. 5th St., Suite 203 Hamilton, MT 59840	(406) 375-0956 bittland@cibernet1.com www.bitterrootlandtrust.org	Bitter Root Valley and adjoining lands	
Blackfeet Land Trust	Norm Peterson P.O. Box 730 Browning, MT 59417	(406) 338-2992	Blackfeet Reservation and adjoining areas	
Five Valleys Land Trust	Wendy Ninteman P.O. Box 8953 Missoula, MT 59807	(406) 549-0755 fvlt@montana.com www.fvlt.org	Missoula, Ravalli, Lewis & Clark, Sanders, Granite, Mineral Counties	
Flathead Land Trust	Susan How P.O. Box 1913 Kalispell, MT 59903	(406) 752-8293 flt@bigsky.net www.flatheadlandtrust.org	Flathead, Lake, Sanders, and Lincoln Counties	
Gallatin Valley Land Trust	Debbie Deagen P.O. Box 7021 Bozeman, MT 59771	(406) 587-8404 gvlt@mcn.net www.gvlt.org	Gallatin, Jefferson, Madison, and Park Counties	
Mid-Yellowstone Land Trust	Anne Cossitt 503 5th Ave. NW Park City, MT 59063	(406) 633-2213 atccons@cw2.com	Southeast and Central Montana	
Montana Wetlands Legacy	Legacy Coordinator 1420 E. 6th Ave. Helena, MT 59620	(406) 444-2612	Statewide	
Montana Wetlands Trust	Charles van Hook 517 Waukesha Helena, MT 59601	(406) 442-3199 cvanhook@aol.com	Statewide	
Montana Land Reliance	Bill Long P.O. Box 355 Helena, MT 59624	(406) 443-7027 mlr@mtland.mt.net www.mtlandreliance.org	Statewide	
Prickly Pear Land Trust	Jerry DeBacker P.O. Box 892 Helena, MT 59601	(406) 442-0490 pplt@mt.net	Jefferson, Lewis & Clark, Counties and adjoining lands	
Save Open Space	Janet Sproull pmb411 1001 East Broadway, Suite 2 Missoula, MT 59802	(406) 549-6083 ssproull@montana.com	Missoula	
The Nature Conservancy	Brian Martin or Bernie Hall 32 South Ewing Helena, MT 59601	(406) 443-0303 bmartin@tnc.org www.nature.org	Statewide	

Landowner Decision Tree Do you want to continue to own your wetland? YES NO Do you want to manage the property exclusively? Do you want compensation for selling the property? YES NO NO YES Options: **Options: Options: Options:** Full market value **Outright donation** Management agreement **Conservation easements** Bargain sale Donation by death time Technical assistance Lease Installment sale transfer Limited development Limited development options Right-of-first-refusal Donation with reserved life strategies estate Do you want the property to be permanently Do you want to restrict future use of the property when the title is transferred?* protected? NO NO YES YES Options: **Options: Options:** Options: Normal transfer Management agreement Conservation easement Conservation easement Technical assistance (prior to transfer) Remainder interest Limited development options Lease

^{*} If landowners wish to guide future use of the property through transfer, they should consider donating a conservation easement for the property to another organization before transferring the property in fee through a normal transfer (i./e., sale or donation). If landowners do not wish to restrict future use of the property, they can transfer the property through a normal transfer.

A Quick Reference Guide To Wetlands Assistance*

	Program	Eligible Lands	Assistance	Sponsor	Contact	Address	E-mail
	Challenge Cost-Share Program	Wetlands on public lands	Financial	BLM	Roxanne Falise	(406) 896-5025 Billings	rfalise@blm.gov
	Conservation Reserve Program (CRP)	Wetlands	Financial	USDA-FSA	Dennis Loreth	(406) 587-6795 Bozeman	dloreth@mt.usda.gov
	Debt For Nature (Conservation Contract Program)	Highly erodible lands, wetlands, and special kinds of habitat that may support particular wildlife	Financial	USDA USDA-FSA	Dennis Loreth Roger Meredith Mel Yost	(406) 587-6795 Bozeman (406) 687-6786 Bozeman (406) 587-6799 Bozeman	dloreth@mt.usda.gov roger.meredith@mt.usda.gov mel.yost@mt.usda.gov
	Emergency Watershed Program	Wetlands	Financial, technical	USDA-NRCS	Dave Kascht	(406) 587-6794 Bozeman	dkascht@mt.usda.gov
	Environmental Quality Incentives Program (EQIP)	Wetlands-farm and ranch lands	Technical, financial, educational	USDA-NRCS	Dennis Loreth	(406) 587-6795 Bozeman	dloreth@mt.usda.gov
	Farmland Protection Program	Wetlands-farmland	Financial	USDA-NRCS	Dennis Loreth	(406) 587-6795 Bozeman	dloreth@mt.usda.gov
	Forest Stewardship Program/ Stewardship Incentive Program (FSP/SIP)	Wetlands	Technical/financial	USDA-NRCS	Robert Logar	(406) 587-6836 Bozeman	blogar@mt.usda.gov
	MARSH	Wetlands	Financial	Ducks Unlimited	Layne Krumwiede	(406) 350-0154 Lewistown	
	Montana Migratory Game Bird Stamp Program	Wetlands	Financial	MDFWP	Tom Hinz	(406) 444-3248 Helena	thinz@state.mt.us
	NAWMP/NAWCA	Wetlands	Financial	USFWS	Jim Stutzman	(406) 727-7400 ext. 24 Great Falls	jim_stutzman@fws.gov
	Partners for Wildlife (PFW)	Wetlands	Financial, technical	USFWS	Jim Stutzman	(406) 727-7400 ext. 24 Great Falls	jim_stutzman@fws.gov
ET	Soil and Water Conservation Assistance (SWCA)	Grazing land, wetlands, and wildlife habitat	Financial	USDA-NRCS	Dennis Loreth	406) 587-6795 Bozeman	dloreth@mt.usda.gov
	Swampbuster/Wetland Conservation Provisions	Wetlands	Technical	USDA-NRCS	Martin Jiminez	(406) 587-6998 Bozeman	mjiminez@mt.usda.gov
	Wetland Protection Development Grants Program	Wetland protection programs State and local governments	Financial	EPA/DEQ	Steve Potts Lynda Saul	(406) 441-1140 ext.232 (406) 444-6652 Helena	potts.stephen@epa.gov lsaul@state.mt.us
	Wetland Development Program	Wetlands	Financial	BOR	Rick Blaskovich	(406) 247-7311 Billings	rblaskovich@gp.usbr.gov
	Wildlife Habitat Incentives Program (WHIP)	Owned lands that are not in mitigation or wildlife program	Financial, technical	USDA-NRCS	Dennis Loreth	(406) 587-6795 Bozeman	dloreth@mt.usda.gov
	Wetlands Reserve Program (WRP)	Restorable wetlands	Financial, technical	USDA-NRCS	Dennis Loreth	(406) 587-6795 Bozeman	dloreth@mt.usda.gov

ME

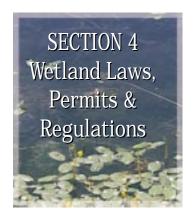
Program Summary	Eligibility	Financial Assistance	Contact
Challenge Cost-Share Program of the Bureau of Land Management, uses various cost- share and specially appropriated funds for riparian/ wetland work on public land in Montana.	Priorities include riparian/ wetland projects.	Annually provides over \$400,000 to match with non-federal goods, in-kind services, and funds to accomplish work with fish, wildlife, and threatened and endangered species and riparian programs. Non-federal partners include MFWP, Ducks Unlimited, universities, and Trout Unlimited	Roxanne Falise (406) 896-5025 fralise@blm.gov Billings
Conservation Reserve Program (CRP) offers annual rental payments and cost- share assistance to establish long-term resource- conserving vegetation on eligible land. Note: The Waterbank Program, which is referred to in Chapter Two's case studies, is no longer accepting new contracts; landowners now enroll in CRP.	1. Cropland that was planted to an agricultural commodity two of the five most recent crop years. 2. Marginal pasture land that is suitable for use as a riparian buffer to be planted to trees. Acreage must be eligible by NRCS determination and suitable for cross wind trap sites, riparian buffers, filter strips, grassed waterways, shelterbelts, field windbreaks, living snow fences, contour grass strips, salt tolerant vegetation, shallow areas for wildlife	The Commodity Credit Corporation (CCC) makes annual rental payments based on agriculture rental value of the land and provides cost-share assistance in the amount equal to not more than 50 % of the participant's cost in establishing approved practices. The duration of the costs are from 10-15 years. CCC will pay up to 50% of the cost of establishing permanent cover.	Dennis Loreth (406) 587-6795 dloreth@mt.usda.gov Bozeman
Debt For Nature Program (Conservation Contract Program) offers a conservation contract in exchange for a borrower's indebtedness to the Farm Service Agency. These contracts can be established for conservation, recreational and wildlife purposes on farm property that is wetland, wildlife habitat, upland or highly erodible land.	USDA borrowers who have highly erodible lands, wetlands and special kinds of habitat that may support particular wildlife.	Loan adjustment made according to a formula in exchange for 50-year or 10- year contracts.	Dennis Loreth (406) 587-6795 dloreth@mt.usda.gov Bozeman Roger Meredith (406) 587-6786 roger.meredith@mt.usda.gov Bozeman Mel Yost (406) 587-6799 mel.yost@mt.usda.gov Bozeman

Program Summary	Eligibility	Financial Assistance	Contact
Emergency Watershed Program/ Floodplain Easement Program works through local government sponsors and helps participants solve natural resource and related economic problems on a watershed basis. Projects include watershed protection, flood prevention, erosion and sediment control, water supply, water quality, fish and wildlife habitat enhancement, wetlands creation and restoration, and public recreation in watersheds up to 250,000 acres in size. Technical and financial assistance is available for installation of improvement projects to protect, develop, and use the land and water resources in small watersheds.	Local or state agency, county, municipality, town or township, soil and water conservation district, flood prevention or flood control district, tribe or tribal organization, or nonprofit agency with authority to carry out, maintain, and operate watershed improvement works.	Technical assistance and counseling, plus cost-share assistance. Funds cover: • 100% of flood prevention construction costs • 50% of construction costs related to agricultural water management, recreation and fish and wildlife • none of the costs for other municipal and industrial water management.	Dave Kascht (406) 587-6794 dkascht@mt.usda.gov Bozeman
Environmental Quality Incentives Program (EQIP) provides a single, voluntary conservation program for farmers and ranchers to address significant natural resources concerns.	Limited to persons who are engaged in livestock or agricultural production. Eligible lands include cropland, rangeland, forest land, pasture and other farm and ranch lands on which crops and livestock are produced.	Cost sharing up to 75% of actual costs of certain conservation practices. Incentive payments up to 3 years paid at a flat rate. Maximum of \$10,000 per person for any fiscal year and \$50,000 for any multi-year contract.	Dennis Loreth (406) 587-6795 dloreth@mt.usda.gov Bozeman
Farmland Protection Program (FPP) helps farmers keep their land in agriculture. The program provides funding to state, tribal or local entities with existing farmland protection programs to purchase conservation easements. The program goal is to protect between 170,000 and 340,000 acres of farmland. Participating landowners can choose to keep their land in agriculture. Landowners retain all rights to the property.	Qualifying land must be • prime, unique or other productive soil • part of a pending offer from a state, local or tribal farmland protection program • privately owned • large enough to sustain agricultural production • accessible to markets for what the land produces and have adequate infrastructure and agricultural support services • have surrounding parcels of land that can support long-term agricultural production. All lands enrolled must have a conservation plan developed according to the NRCS Field Office Technical Guide.	USDA joins with state, local, or tribal governments to acquire conservation easements or other interests from landowners.	Dennis Loreth (406) 587-6795 dloreth@mt.usda.gov Bozeman

Program Summary	Eligibility	Financial Assistance	Contact Person
Forest Stewardship Program (FSP) and Stewardship Incentive Program (SIP) are companion programs created by the 1990 Farm Bill to provide technical and financial assistance to landowners who want to protect and enhance their forest lands and associated wetlands and wildlife habitat. FSP provides landowners with a training workshop that prepares them to develop their own management plan.	Landowners must not derive most of their income from timber management on the property, must own 10-1,000 acres of forest land, and activities must be maintained for at least 10 years. Public access need not be provided for eligibility.	SIP provides 75% cost share for plan development and for implementation of planned practices.	Robert Logar (406) 587-6836 blogar@mt.usda.gov Bozeman
MARSH (Matching Aid to Restore States Habitat Program) is a program of Ducks Unlimited to enhance waterfowl habitat.	Proposals from any public agency or private conservation group that can: • execute long-term habitat agreements • deliver and manage the projects proposed • assume all liability associated with the project	Cost-shared assistance up to 50%. Costs exceeding this amount require special approval.	Layne Krumwiede (406) 350-0154 Lewistown
Montana Migratory Game Bird Stamp Program sells stamps and associated art to raise \$200,000 annually for wetland development projects. The emphasis is on wetland habitat projects that will increase waterfowl production and brood survival—generally shallow wetland creation and restoration. Sites with adequate nesting cover near the wetlands receive priority and typically include large blocks of native or introduced grasses/legumes.	Areas with good adjacent upland nesting cover such as native rangeland or CRP enrolled acres. Eligible practices include restoring drained wetlands, constructing new reservoirs, repairing breached dams or damaged spillways, installing water control structures, establishing suitable upland nesting cover, and working with landowners to implement managed grazing systems. Program generally requires reasonable public access controlled by the landowner.	Up to 100 % of construction costs; generally focuses on sites where work is to be completed at a cost of \$1000-\$2000 per wetland surface acre.	Tom Hinz (406) 444-3248 thinz@state.mt.us Helena
North American Waterfowl Management Plan (NAWMP) and North American Wetland Conservation Act (NAWCA) work together to reverse waterfowl declines in U.S., Canada and Mexico. Partners pool resources to conserve millions of acres of waterfowl habitat in areas deemed critical to waterfowl. The joint ventures pursue non-regulatory strategies that can be implemented through voluntary and cooperative actions.	Projects that fall within established joint ventures, such as the Prairie Pothole Joint Venture and the Intermountain West Joint Venture, receive highest priority. All who are interested in wetlands, waterfowl, other wetland wildlife, soil and water conservation and sustainable resources are encouraged to join these partnerships.	NAWCA is a principal fund source for the NAWMP. The Act created the North American Wetlands Conservation Fund designed to help support projects on public and private lands. A 9-member council reviews annual project proposals submitted by partners for funding.	Jim Stutzman (406) 727-7400, ext 24 jim_stutzman@fws.gov Great Falls

Program Summary	Eligibility	Financial Assistance	Contact Person
Partners for Fish and Wildlife Program (PFW) provides funding and technical assistance to private landowners interested in fish and wildlife habitat projects on their land. PFW evaluates projects from a biological and cost/benefit standpoint. In addition to wetland habitat work, PFW also does instream and riparian restoration, fish and wildlife-friendly irrigation systems, and a myriad of other projects.	Landowner must sign a Wildlife Extension Agreement (WEA), which does not require landowners to provide hunter access. Montana focus areas include the Blackfoot Valley, Rocky Mountain Front, Beaver Creek, Mission Valley and Centennial Valley.	Program is flexible and considers the landowner's economic goals. \$500,000 to \$750,000 available in Montana annually. Matching funds and fund raising partnerships are critical.	Jim Stutzman (406) 727-7400, ext 24 jim_stutzman@fws.gov Great Falls
Soil and Water Conservation Assistance (SWCA) provides cost share and incentive payments to farmers and ranchers to voluntarily address threats to soil, water, and related natural resources, including grazing land, wetlands, and wildlife habitat. SWCA will help landowners comply with Federal and state environmental laws and make beneficial, cost-effective changes to cropping systems, grazing management, nutrient management, and irrigation.	Applicants must own or control the land and agree to implement specific eligible conservation practices. Eligible land: • Cropland • Hayland • Pasture and rangeland • Land used for subsistence purposes • Other land (such as forestland) that produces crops or livestock where there is a serious threat to soil, water, or related natural resources.	SWCA is budgeted at \$20 million for fiscal year 2001. The maximum total payment per participant for SWCA shall not exceed \$50,000.	Dennis Loreth (406) 587-6795 dloreth@mt.usda.gov Bozeman
Swampbuster/ Wetland Conservation provisions help preserve the environmental functions and values of wetlands, including flood control, sediment control, groundwater recharge, water quality, wildlife habitat, recreation, and esthetics. The 1996 Farm Bill changed Swampbuster to give producers greater flexibility to comply with wetland conservation requirements and to make wetlands more valuable and functional.	Participants in USDA programs, such as farmers, ranchers and any other program beneficiaries.	Not Available	Dave Heilig (406) 587-6795 dloreth@mt.usda.gov Bozeman
Wetland Development Program provides grants or cooperative agreements to public or private organizations for improvement of wildlife associated with water systems or supplies affected by BOR projects.	Projects of conservation districts and private conservation groups that address wildlife habitat needs within a given area. Existing programs in a basin where BOR water supplies are being affected.	The limited private lands authority under this program provides challenge cost-share opportunities.	Rick Blaskovich (406) 247-7311 rblaskovich@gp.usbr.gov Billings

Program Summary	Eligibility	Financial Assistance	Contact Person
etland Protection Development Grants ogram makes grants available to states and bes for development and/or enhancement of etlands protection programs; for training leading development of state wetlands protection ograms; and for wetland protection monstration and restoration projects. Eligible entities include state wetlands agencies, state water quality agencies, state agencies with wetland-related programs, federally recognized tribes; and local governments. Partnerships with others are eligible.		Grants awarded on a competitive basis within an EPA region. Recipients must cost-share a minimum of 25% of each award's total project costs. Proposals are submitted annually in late fall. Grants for wetland conservation or protection program development; no funding for operations.	Steve Potts (406) 441-1140, ext 232 potts.stephen@epa.gov Helena Lynda Saul (406) 444-6652 lsaul@state.mt.gov Helena
Wetlands Reserve Program (WRP) provides landowners with financial incentives to restore, create and enhance wetlands. Landowners may establish a conservation easement or enter into a cost-share restoration agreement. Landowners voluntarily limit future use of the land, yet retain private ownership. Landowners and the NRCS develop a plan for the restoration and maintenance of the wetland.	Easement participant must have owned the land for at least one year. Owner can be an individual, partnership, association, corporation, estate, trust, business or other legal entity, a state (when applicable), political subdivision of a state, or agency of a state. Land must be restorable and be suitable for restoration and wildlife benefits.	WRP provides three options to the landowner: • Permanent Easement: USDA purchases easement (price is lesser of the land value or payment cap); USDA pays 100% of restoration costs • 30 year Easement: Pays 75% of what would be paid for a permanent easement and 75% of restoration costs • Restoration Cost-share Agreement: Minimum ten-year agreement to restore degraded wetland habitat. USDA pays 75% of restoration costs	Dennis Loreth (406) 587-6795 dloreth@mt.usda.gov Bozeman
Wildlife Habitat Incentives Program (WHIP) is for people who want to use both technical assistance and cost-sharing to help establish and improve fish and wildlife habitat. Participants work with NRCS to prepare a wildlife habitat development plan in consultation with the local Conservation District and partners. The plan describes the landowner's goals for improving wildlife habitat, includes a list of practices and a schedule for installing them, and details the steps necessary to maintain habitat for the life of the agreement.	Individuals must own or have control of the land under consideration, and cannot have the land already enrolled in mitigation or programs that have a wildlife focus, such as the WRP.	USDA pays up to 75% of the cost of installing wildlife enhancement practices.	Dennis Loreth (406) 587-6795 dloreth@mt.usda.gov Bozeman



During the past 25 years, our scientific understanding of the value and functions of wetlands has increased, and so has our society's commitment to protecting wetlands. Our laws express that commitment, and government regulations implement the laws. This section describes wetland protection laws and provides charts to help you navigate the mazes of permits and regulatory requirements.

What Is A Wetland?

Wetlands protection agencies have adopted a consistent definition developed by the Army Corps of Engineers (ACOE), as found in The Wetlands Delineation Manual of 1987:

Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

This definition is based on hydrology, hydric soils and hydrophytic vegetation. (See also page 4, Section 2.) Only areas that meet all three criteria are regulated wetlands that are subject to federal regulation.

What about artificial wetlands?

The Natural Resources Conservation Service (NRCS) defines an artificial wetland as land that was

not a wetland under natural conditions, but now exhibits wetland characteristics due to human activities. Human-induced wetlands, like those under irrigation, may meet the requirements of wetlands by

Glacial prairie pothole near Ovando.

water, soils, and vegetation and still not be subject to ACOE regulatory authority.

It is also possible that the artificial wetland may not be subject to regulation in the NRCS Swampbuster Program but can be regulated by the ACOE under Section 404 of the Clean Water Act. The ACOE decides, on a case by case basis, if a human-induced wetland is subject to protection.



Bullrush (Scirpus maritima) in wetland north of Roy, Montana.

Key Federal Laws Affecting Wetlands

Clean Water Act (CWA) of 1972

Regulates pollution and is administered wholly by the EPA and state agencies, except for Section 404, jointly administered by the ACOE and EPA.

Section 401 requires that states review and certify federal permits that may result in pollution discharges into surface waters and wetlands

Section 402 requires a permit for any discharge of pollutants from a point source into navigable waters

Section 404 administered by the Army Corps of Engineers (ACOE), governs dredging and filling in jurisdictional waters

National Environmental Policy Act	NEPA requires that all federal government agencies prepare environmental impact statements on relevant major federal actions
Executive Order 11990	Requires federal agencies to take action to minimize the destruction, loss or degradation of wetlands and to preserve the natural values of wetlands on federal lands (Notice that this is not a law, so its binding affects differ.)
Rivers and Harbors Act	Gives authority to the ACOE to prohibit discharge of solids or construction into tidal and navigable or adjacent waters
Food Securities Act of 1985	"Swampbuster," denies federal subsidies for conversion of wetlands to agricultural uses
Endangered Species Act	Administered by the U.S. Fish and Wildlife Service, protects wetlands that offer unique habitat for endangered and threatened species

Montana State Laws Affecting Wetlands

Montana has little legislation dealing directly with wetlands although the Montana Environmental Policy Act and two Montana Administrative Rules do regulate activities that may affect wetlands. (See Regulations Maze Chart which follows)

Tribal Laws Affecting Wetlands

Tribal governments in Montana safeguard the health, welfare, and economic security of their people. They protect aquatic resources including wetlands that are critical for water quality, fisheries and wildlife. The Confederated Salish and Kootenai and Blackfeet Tribes currently have regulations and ordinances in place. The tribes on the other five reservations in Montana are also developing wetland programs and strategies. If you own land adjacent to or within reservation boundaries, you need to consult with the appropriate tribal government office about wetlands on your property.

Wetlands on the Flathead Reservation

The Confederated Salish and Kootenai Tribe has specific tribal codes for wetland management. One ordinance addresses the banks below the high water mark of the south half of Flathead Lake and another ordinance protects wetlands and riparian areas throughout

the remainder of the reservation. The Aquatic Lands Conservation Ordinance (ALCO) prevents degradation of Reservation waters and aquatic lands by regulating construction whenever such a project will cause erosion, sedimentation, or other disturbances adversely affecting water quality. Permits are obtained and processed through the Shoreline Protection Program Office of the Confederated Salish and Kootenai Tribe. Failure to comply with the permit terms may result in law enforcement. Presently, the Confederated Salish and Kootenai Tribe is developing a

comprehensive management plan that includes a no net loss policy and wetlands guidelines. The plan has been evolving for the past 10 years, and includes wetlands mitigation for the 1.25 million acre Flathead Reservation.

The Blackfeet Nation's Wetlands Plan

Mary Clare Weatherwax, Wetlands Program Coordinator for the Blackfeet Nation, explains the tribe's wetland authority:

In 1993, the Blackfeet Tribe passed

Ordinance 90, the Aquatic Lands Protection Ordinance. The tribe issues permits for all construction and fill projects that occur in wetlands, riparian areas and streams. The tribe has authority to fine anyone who works in wetlands or waters of the reservation without a permit, to revoke a permit for non-compliance



Potholes near Charlo, Montana

of permit conditions, and to require restoration or replacement of damaged wetlands, riparian areas and streams.

The main way the Blackfeet Tribe currently protects wetlands is through the use of Ordinance 90, the Aquatic Lands Protection Ordinance. This tribal ordinance requires that a permit be issued through the Tribal Water Resources Department in order for work to begin in a wetlands area. The administrator for

Ordinance 90 is the Blackfeet Water Resources Department Director, Mike Tatsey. He works collaboratively with the Blackfeet Environmental Office Director, Gerald Wagner, to issue permits and violation notices. The Water Resources Department hosts regular meetings with the other natural resources staff to make comments

on all proposed actions/permits.
Additionally, the tribe coordinates their efforts with the Army Corps of Engineers (Section 404 permitting), and with the Environmental Protection Agency (Section 401 Water Quality Certification). The tribe has also created a draft Wetlands Management Plan in order to protect wetlands on the reservation.

The Blackfeet Tribe Wetlands
Protection Program is funded through
the EPA and the goal is development
of a wetlands protection program on
the Blackfeet Indian Reservation. In
order to meet that goal, the tribe has
a wetlands monitoring program that
has collected baseline data on a
subset of wetlands in all four

watersheds within the reservation boundary. A draft wetlands management plan has been developed, specifying how wetlands will be protected on the reservation. In addition, the Wetlands Protection Program is involved in several wetlands creation projects on the Blackfeet Indian Reservation, and works with Aquatic Lands Protection ordinance permits that are issued on the reservation by the Water Resources Department.

Navigating The Permit Maze * Typical Question Permit # **Waiting Period Contact Agency** Answer "I want to build an access road across the wetland to Yes get to my new house. Do I need a permit?" Heavy equipment requires a permit. Hand-held equip-ACOE, or DEQ may Usually 30 days for projects Allan Steinle ment, such as chainsaws be contacted of minimal environmental "I want to clear away some or staff and shovels, may be used 404 impact and 60-120 days for shrubs and brush on my regarding water 406-441-1375 without a permit. wetland. Can I use a quality issues major impact. bulldozer and grader?" Yes. You need a permit to use heavy equipment in a wetland or drainage area If water is being to excavate, or to build an diverted into or impoundment or berm. otherwise artificially "I want to build a pond. manipulated to Water right applications may Local DNRC Do I need a permit?" remain in a wetland Montana DNRC Water Resources take from 2 months to up to You may need (such as through 2 years to complete. Regional Office a water right. excavated ponds or dikes) you may need Local CD, which meets a water right. Submit application for monthly, determines if a 310 permit to local permit needed. If so, CD will "I want to build a gravel bar_ Conservation District **Local County** schedule inspection and to direct the flow of stream (CD). Depending on Conservation submit a report at the next Yes 310 water into the irrigation the nature of the work District (CD) meeting. If a 310 permit is ditch. Do I need a permit?" and the location, the given, it is valid for 1 year. DEQ and DNRC may March is a good time to submit also need to be application for permit, which Find out from a consultant contacted. is usually needed by August. or NRCS, who will locate your land on a soil map. Possibly 404. If Local NRCS (Also (You must have legal minor disruption Time to check soil map "Do I have a wetland? I provides a wetlands description of property in (< 3 acres), you may (1 hour to 2 days). Schedule USDA. need to know for a building writing.) If your land technical guide of be able to proceed depends on consultant, NRCS. project." contains hydric soil, NRCS regional wetland under a nationwide demands, area of land and **ACOE** will refer you to a list of permit. You need a plants.) coordination with others. wetlands consultants for a letter from ACOE Usually 30 days for projects Allan Steinle or staff wetland delineation. If confirming this. of minimal environmental 406-441-1375 dredge or fill is needed, impact and 60-120 days for ACOE must be consulted. major impact. 37

Navigating The Regulations Maze *				
Activity	Regulation	Purpose	Permit	Agency/Contact Person
Highway construction, bridge and culvert replacement.	Clean Water Act: Section 404 and Executive Order #11990, Wetland Mitigation	Mitigates wetland impacts associated with federally funded transportation projects.	MDT tracks their wetland losses and mitigates in accordance with no net loss policy	Larry Urban, MDT 406-444-6224 lurban@state.mt.us
Pond enlargement, filling for commercial and family dwellings, pipeline construction, roadway construction.	Clean Water Act: Section 401 Water Quality Certification	Ensures that actions related to any federal permit or license are consistent with the state's water quality standards.	401 Certification	Jeff Ryan, DEQ 406-444-4626 jryan@state.mt.us
Pond excavation, bank stabilization, culverts or bridges across wetlands, utility line crossings, boat ramps.	Clean Water Act: Section 404 Advanced Identification, Permit Review, Dredge and Fill Permit	Restores and maintains chemical, physical, and biological integrity of national waters, including wetlands, by regulating the placement of dredge and fill material.	404 Permit	Jean Ramer, ACOE 406-441-1375 EPA, 404 Permitting 406-441-1140
Drainage of a wetland, blockage of fish passage, and habitat destruction.	Endangered Species Act, and Fish and Wildlife Coordination Act	Provides a means to conserve ecosystems upon which the endangered and threatened species depend.	404, reviewed by USFWS	Rob Hazelwood, USFWS 406-449-5225 rob_hazelwood@fws.gov
Construction, industrial, and mining and gas activities that discharge storm waters to state waters	Federal Clean Water Act, Montana Water Quality Act, Montana Administrative Rule 17.30.1301	Controls movement of sediments from construction sites and other activities.	Montana Pollution Discharge Elimination System (MPDES) Permits	MPDES permits call 406-444-3080
Burning, clearcutting, operating vehicles off established roads, disposal of hazardous or toxic materials in a manner that pollutes wetlands or that may cause damage to humans, animals or plants	Montana Administrative Rule 36.11.301	Protects riparian zone from logging practices.	Streamside Management Zone Permit	Rob Ethridge, DNRC 406-542-4326 rethridge@state.mt.us
Bridge construction, streambank stabilization, channel construction	Montana Administrative Rule 75.5.318 MCA	Temporarily exempts certain construction action in water from turbidity water quality standards.	Temporary Narrative Standard for turbidity for construction related activities in Montana state water	406-444-4626
Logging, fire management, permitted grazing, any construction activities that impact the environment	Montana Environmental Policy Act	Ensures that state acts which may impact wetlands be analyzed and documented in an environmental impact report and opportunity for public comment where appropriate.	State agency reviews impacts	Todd Everts Environmental Quality Council 406-444-3742
If water is being diverted into or otherwise artificially manipulated to remain in a wetland (such as through excavated ponds or dikes), a water right may be required.	Montana Water Use Act	To avoid adversely affecting other water right holders and ensure a legal right to water for the project.	Water Right Permit and Change Authorization	Curt Martin, DNRC 406-444-6631 Local DNRC Water Resources Regional Office
Draining wetlands for agricultural purposes	National Food Security Act, Swampbuster Provision, 1985, 1990, 1995	Protects wetlands.	None	Martin Jiminez, NRCS 406-587-6998 mjiminez@mt.usda.gov
Logging, fire management, permitted grazing, any construction activities that impact the environment	National Environmental Policy Act and National Environmental Protection Act	Ensures that government acts that impact wetlands are analyzed and documented in a detailed environmental impact report.	Federal or state agency reviews impacts	Generally, the agency with authority over the action.
Irrigation diversions, streambank stabilization with riprap, equipment crossings, culverts, bridges, dams	Natural Streambed and Land Preservation Act	Requires permit to engage in any activity that will modify a stream, its bed or banks	310 Permit	MT Association of Conservation Districts, 406-443-5711 to find local county CD or NRCS

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